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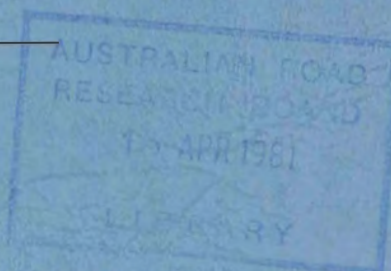
1980

PARLIAMENT OF TASMANIA

DEPARTMENT OF MAIN ROADS

REPORT FOR YEAR 1979-80

Presented to both Houses of Parliament by His Excellency's Command



By Authority:
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DEPARTMENT OF MAIN ROADS

FOURTH ANNUAL REPORT For the year ended 30 June 1980

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DEPARTMENT OF MAIN ROADS

Director of Main Roads — G. E. C. McKERCHER

Assistant Director — L. J. BAILY

Secretary — K. G. RASMUSSEN

PRINCIPAL OFFICERS — HEAD OFFICE

Assistant Secretary — R. F. READ

Chief Accountant — F. J. DRAKE

Principal Engineer, Design — C. R. WILLING

Principal Engineer, Construction — D. A. WHARMBY

Division Engineer, Road Design — W. D. COOMBS

Division Engineer, Road Construction — O. A. WILSON

Division Engineer, Bridges — I. A. GAGGIN

Division Engineer, Plant — F. N. LAKIN

PRINCIPAL OFFICERS — DISTRICTS

District Engineer, South-East, Derwent Park — M. G. LINTON

Executive Officer — G. S. GRIGGS

District Engineer, North-East, Launceston — P. A. MEYER

Executive Officer — R. A. PETERS

District Engineer, North-West, Ulverstone — J. H. DRISCOLL

Executive Officer — C. J. MORGAN

DEPARTMENT OF MAIN ROADS

ANNUAL REPORT FOR 1979-80

FOREWORD

With the exception of national highways, which have been funded by the Commonwealth at a fairly constant level, there has been a continuing decline over recent years of the funds available from Commonwealth and State sources for the improvement of arterial roads, particularly rural arterials.

It has therefore been necessary to continue to defer the warranted reconstruction of some important rural arterial roads and adopt a strict order of priority in the allocation of available funds.

On many sections of the rural arterial system, the possibility of providing funds for full reconstruction appears to be remote and the existing roads must be retained in service despite deficiencies in alignment and width for the volume and type of traffic using them. An increasing proportion of available funds therefore needs to be allocated for the rehabilitation and strengthening of existing pavements but with no improvement to alignment or width. If the funds for reconstruction of rural arterial roads do not increase substantially, then an increasing proportion of the available funds will have to be directed to works required to preserve existing sub-standard roads and warranted reconstruction projects will continue to be deferred.

Traffic volumes on the State road system are continuing to increase at growth rates of three to five per cent per annum on some classes of roads, with significant increases in the number and size of heavy transport vehicles. Overloading by heavy vehicles has a very damaging effect on road pavements and the extent of overloading by some sectors of the transport industry is a matter of considerable concern. It seems that the present levels of fines and penalties for overloading are not a sufficient deterrent and are sometimes regarded as a normal commercial risk and part of the overheads of transport operations.

An area in which a change of policy has occurred is in the acquisition of land for road purposes. Acquisition of properties is always a significant item in the Departmental budget, and, in addition to the direct costs of acquisition, the time involved in finalising acquisition and securing access to land sometimes causes delays to projects, thereby increasing construction costs.

During the past year greater use has been made of the Notice to Treat provisions in the Lands Resumption Act 1957, particularly in cases where a number of acquisitions of land are required for a project. This has two advantages over the procedure of acquisition purely by negotiation and agreement. Firstly, it sets the date at which compensation is to be assessed and all vendors of property required for the project are treated equally on the matter of the date for assessing compensation, and secondly, it ensures that projects are not unduly delayed as the land is vested in the Crown from a specified date.

In May 1980 the Commonwealth Minister for Transport announced details of the grants of financial assistance for roads to be provided to the States under the Commonwealth Roads Grants Act 1980. Unlike the States Grants (Roads) Act 1977, which provided financial assistance for roads over a three year period (1977-78, 1978-79 and 1979-80), the Roads Grants Act 1980 only provides grants for the 1980-81 financial year.

The total grant to Tasmania is \$27 726 000, made up as follows:—

[illegible]

The number of road categories provided in the new Act has been reduced to four compared with the eight categories in the States Grants (Roads) Act 1977.

Under the new Act the Commonwealth grants can be expended on the maintenance of all roads, except for the categories of urban arterial and rural arterial roads. Under the previous legislation the Commonwealth grants could only be expended, as far as maintenance was concerned, on national highways and rural local roads.

The total grant to Tasmania (and other States) for 1980-81 has only been increased by 11.15 per cent over the total grant for 1979-80. Taking into account the expected rate of inflation of road construction and maintenance costs, the Commonwealth grant for 1980-81 will, in real terms, result in no increase in expenditure above the 1979-80 Commonwealth funds and therefore will not permit any increase in roadworks.

FINANCE

General

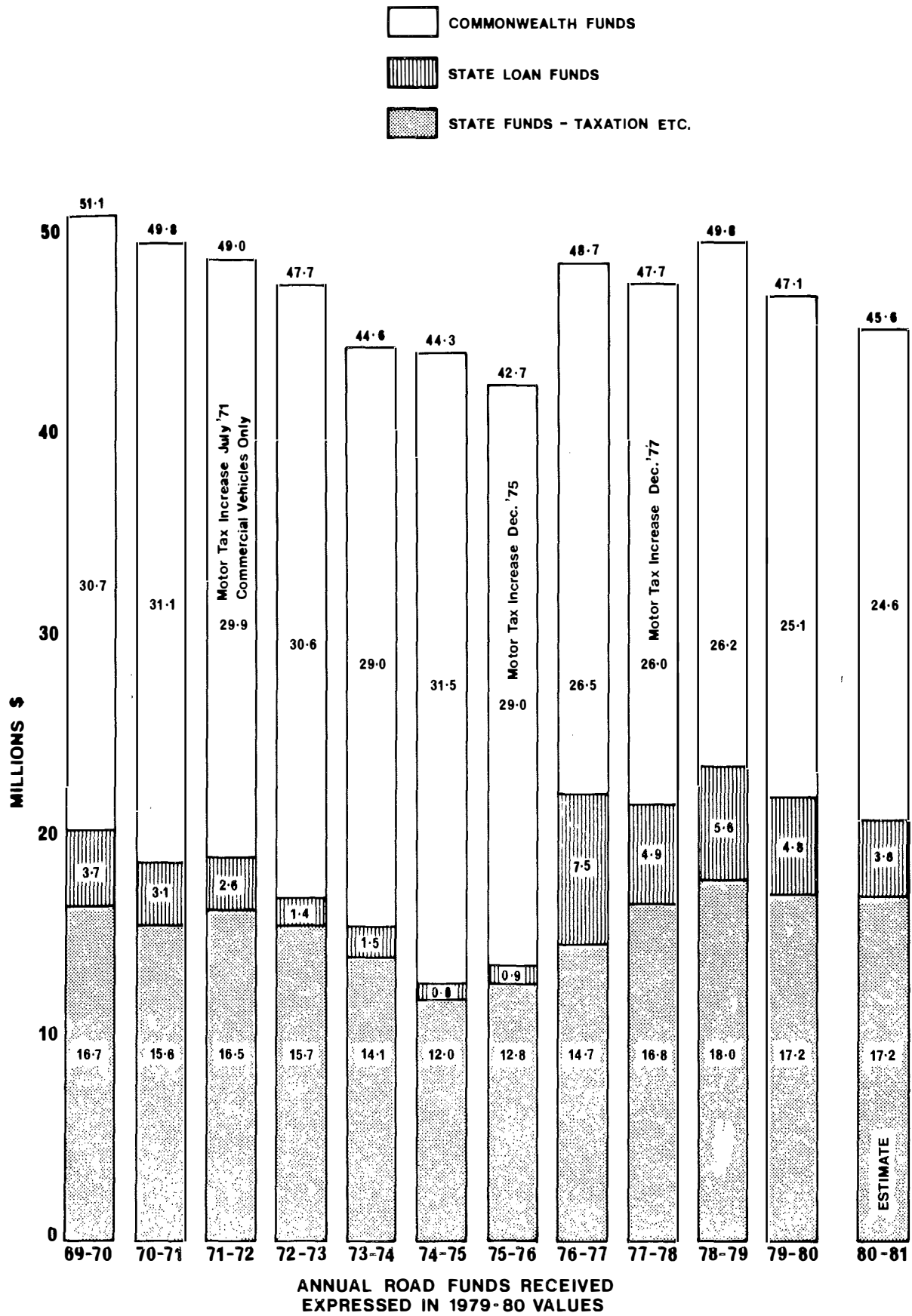
The Department has maintained, for a number of years, an annual Road Construction Cost Index which, it is believed, reflects with reasonable accuracy the cost increases applying to the Government road construction industry in Tasmania. Other State Road Authorities also produce cost indices which show a similar pattern of cost rises.

The index developed by the Department, together with the Consumer Price Index adjusted to the same base year, is set out below.

<i>Date 30 June</i>	<i>D.M.R. Road Index</i>	<i>Consumer Price Index</i>
1970	100.0	100.0
1971	110.8	104.6
1972	122.0	111.3
1973	133.8	119.3
1974	162.4	136.8
1975	199.3	158.0
1976	233.6	183.0
1977	263.5	206.8
1978	283.3	224.0
1979	300.6	243.6
1980	337.6	268.3

Inflation affects different sectors of the community by different degrees, and road costs, as evidenced by this index, have increased by 238 per cent since 1970, whereas over the same period the Consumer Price Index has increased by 168 per cent.

The rate of inflation affecting the operations of the Department of Main Roads for the financial year 1980-81 is currently estimated to be approximately 13 per cent per annum. Commonwealth grants available to the Department for road purposes were indexed by 7.48 per cent for 1979-80 and 11.15 per cent for 1980-81.



Motor Taxation

Receipts from motor taxation were \$14 924 932, an increase of 3·7 per cent over the preceding year, while public vehicle fees increased by 9·2 per cent to \$1 123 480 in 1979-80.

Miscellaneous Receipts

Receipts from this source were \$970 683, compared with \$774 810 in 1978-79, and includes tolls received from the woodchip industry as well as reimbursement from the Commonwealth for transport planning and research expenditure.

Commonwealth Grants for Roads

For the three financial years commencing 1 July 1977, the Commonwealth Government provided finance under the States Grants (Roads) Act 1977 to Tasmania comprising of a basic grant of \$65 100 000, at the rate of \$21 700 000 per year.

When the legislation was introduced in the Federal Parliament, the Minister for Transport stated that the grants allocated for 1978-79 and 1979-80 would be indexed so as to ensure that the value of the grants was maintained at the 1977-78 level in real terms.

The allocations for the years 1977-78, 1978-79 and 1979-80 were as follows:—

	1977-78 \$ m	1978-79 \$ m	1979-80 \$ m
National Roads — Construction	7·90	8·449	9·081
National Roads — Maintenance	·90	·962	1·034
National Commerce Roads — Construction	·70	·749	·805
Rural Arterial Roads — Construction	3·00	3·208	3·448
Rural Local Roads — Construction and Maintenance	4·90	5·241	5·633
Urban Arterial Roads — Construction	2·70	2·888	3·104
Urban Local Roads — Construction	1·00	1·069	1·149
Minor Improvements for Traffic Engineering and Road Safety	·60	·642	·690
TOTALS	21·70	23·208	24·944

In order to qualify for the above grants, Tasmania was required to expend on roadworks from its own resources a quota of \$12·3 m in 1977-78 of \$13·155 m in 1978-79 and \$14·139 m in 1979-80.

All financial assistance payable under the States Grants (Roads) Act 1977 for 1979-80 was received.

Loan Funds

Loan funds provided to the Department for roads, bridges and other works totalled \$5 022 305, a decrease of 3·7 per cent on the previous year.

Funds Provided by Other Departments and Authorities

Payments received by the Department for works carried out for other departments and authorities amounted to \$2 492 188, compared with \$1 784 579 in 1978-79. The increase was due mainly to the Department undertaking major roadworks for the Hydro-Electric Commission on the Pieman River Power Development Scheme, the National Parks and Wildlife Service and miscellaneous works for the Department of Housing and Construction.

Statement of Source and Application of Funds

Funds provided during 1979-80 from all sources amounted to \$51 167 288, an increase of 6·1 per cent over the previous year as shown in the statement on page 11:—

Sources of Funds

1978-79 \$		1979-80 \$	\$
	State Highways Trust Fund—		
16 191 891	(a) State Motor Taxation, Public Vehicle Fees and Miscellaneous Receipts	17 019 073	
23 208 000	(b) Commonwealth Grants for Roads	24 944 000	
			41 963 073
5 213 621	Loan Funds		5 022 305
49 754	Special Commonwealth Funds		637 155
1 189 330	Consolidated Revenue Fund		1 052 567
1 784 579	Funds Provided by other Departments and Authorities		2 492 188
577 377	Net Decrease in Funds carried forward		....
\$48 214 552			\$51 167 288

Application of Funds

1978-79 \$		1979-80 \$	\$
	State Highways Trust Fund—		
33 439 144	Roadworks	33 048 313	
6 519 595	Bridgeworks	8 405 423	
17 656	Ferries	8 994	
873	Second Hobart Bridge	....	
	Net increase in funds carried forward from —		
....	Balance 30.6.80	\$993 327	
....	Less Balance 30.6.79	492 984	
		500 343	
			41 963 073
	Loan Funds —		
3 906 552	Roadworks	3 834 254	
1 122 448	Bridges	977 246	
106 477	Jetties and Facilities for Fishermen	150 000	
78 144	Launceston Flood Protection	60 805	
			5 022 305
	Special Commonwealth Funds —		
49 754	Second Hobart Bridge	637 155	
			637 155
	Consolidated Revenue Fund—		
299 628	Departmental Administration	334 085	
164 935	Workers' Compensation (Other Departments)	107 733	
124 944	Repairs to Jetties	100 000	
459 901	Contributions and Grants for Sundry Buildings and Facilities and Miscellaneous Expenses	399 446	
139 922	Other Miscellaneous Expenses Including Recreation Ground Subsidies	111 303	
			1 052 567
1 784 579	Works for Other Departments and Authorities	....	2 492 188
\$48 214 552	TOTAL		\$51 167 288

State Highways Trust Fund

The State Highways Trust Fund Account is established under the Roads and Jetties Act 1935. The fund is credited with the following moneys:—

- (1) all grants made by the Commonwealth under the States Grants (Roads) Act 1977;
- (2) funds received by the Department from grants made to the State by the Commonwealth under the Transport Planning and Research (Financial Assistance) Act 1977;
- (3) all State motor taxation;
- (4) the net amount of registration fees for motor vehicles, licence fees for drivers and renewal and transfer fees;
- (5) public vehicle fees imposed under section 20A of the Traffic Act 1925;
- (6) contributions by Municipal Councils for the maintenance of classified roads;
- (7) receipts from sale of stores (other than plant);
- (8) any moneys provided by Parliament for the purposes of the fund; and
- (9) such other moneys (if any) as the Treasurer may direct.

The fund is debited with the following:—

- (a) expenses incurred in the construction, reconstruction and maintenance of State highways and other classified roads;
- (b) costs incurred in the maintenance of Council roads which the Minister has agreed to subsidise;
- (c) contributions to the Bruny, Flinders and King Island Municipalities of portion of the Motor Tax collected in those Municipalities;
- (d) all expenditure incurred under the provisions of the States Grants (Roads) Act 1977 and the Transport Planning and Research (Financial Assistance) Act 1977;
- (e) costs of stores and materials (other than plant); and
- (f) repair and renewal of bridges on Council roads.

A summarised statement of receipts and payments for the State Highways Trust Fund Account for 1979-80 is set out below, together with the corresponding figures for 1978-79:—

State Highways Trust Fund 1979-80

1978-79 \$		Receipts	1979-80 \$
1 069 488	Balance brought forward	....	492 984
23 208 000	Commonwealth Grants for roads	....	24 944 000
14 387 964	Motor Taxation	....	14 924 932
1 029 117	Public Vehicle Fees	....	1 123 458
774 810	Miscellaneous Receipts	....	970 683
<u>\$40 469 379</u>	TOTAL	....	<u>\$42 456 057</u>
Payments			
9 177 953	National Highways	....	10 230 582
865 017	National Commerce Roads	....	906 471
11 769 806	Rural Arterial Roads	....	12 276 983
7 780 218	Rural Local Roads	....	7 701 757
7 570 943	Urban Arterial Roads	....	7 570 948
1 343 689	Urban Local Roads	....	1 548 497
762 602	MITERS	....	719 087
706 167	Transport Planning and Research	....	508 405
873	Second Derwent Crossing Suspense Account	....	....
492 111	Balance carried forward	....	993 327
<u>\$40 469 379</u>	TOTAL	....	<u>\$42 456 057</u>

Loan Fund Expenditure

The loan funds of \$5 022 305, allocated to the Department for roads and bridges and other works, were applied as follows:—

1978-79 \$		1979-80 \$
4 700 000	Roads and Bridges	4 500 000
513 621	Other Works	522 305
<u>\$5 213 621</u>	TOTAL	<u>\$5 022 305</u>

A schedule of expenditure items and amounts is shown in Annexure A. It should be noted that the loan fund amounts for the road and bridge items listed in the schedule were in all cases supplemented by funds from the State Highways Trust Fund.

Financial Assistance to Local Government Authorities

Under the provisions of the States Grants (Roads) Act 1977 and the Roads and Jetties Act 1935 the Department made direct grants to local government authorities for construction and/or maintenance of roads controlled by Councils. The direct grants to Councils totalled \$6 322 563, an increase of 15.1 per cent over the amount of the direct grants provided in 1978-79.

In addition to the direct grants, the Department also provided indirect financial assistance to local government authorities. Under the provisions of the Roads and Jetties Act the Department financed the repair and renewal of bridges on Council roads and carried out these bridgeworks. The Department maintained those Council roads which have been declared as subsidised roads and provided funds to the National Parks and Wildlife Service for work on Council roads. The indirect financial assistance to Councils totalled \$1 390 895, a decrease of 4.1 per cent over the preceding year.

The total of direct grants and indirect financial assistance to Councils was \$7 713 458, an increase of 11.1 per cent over 1978-79. The amounts of direct grants and indirect financial assistance to Councils for the various categories of roads and works are shown in Annexure B.

PLANNING AND DESIGN

Burnie Highway Environmental Impact Study (BHEIS)

This study commenced in March 1979 and continued into the year, culminating in the submission of the BHEIS report in March 1980.

The study was conducted in a manner that permitted maximum involvement by the Burnie community in the identification of problems and the development and evaluation of alternative solutions. This was aided by the co-operation of the Technical and Local Advisory Committees, formed to assist the Study Team.

The preliminary findings of the study, comprising various alternatives for Stages B and C of the Burnie Highway System and the consequences of these alternatives in environmental, social, traffic, engineering, land use and economic terms, were placed on public display in the Hellyer Regional Library for four weeks from mid-September 1979. The display received extensive media publicity and was visited by over 2 000 persons. Comments submitted by individuals and organisations during and after the display were recorded and were taken into account in the final evaluation of alternatives.

At a meeting of Council and local community representatives in Burnie on 16 May, 1980, the Minister for Main Roads and Transport announced that the Department and the Government supported the recommendations made by the Study Team and that representation would be made to the Federal Government to have the King Street alignment for Stage B included as part of the National Highway.

Advice from the Federal Minister is now awaited.

Derwent Region Transportation Study (DRTS)

This Study commenced in 1977-78 to review the traffic, road and transport situation in the Greater Hobart area and to recommend improvements for the next decade.

The Final Report of the Study was presented to the Government and to local government authorities in March 1980.

The Report recommends roadworks in all municipalities in the region and suggests a programme for their implementation over the next ten years. In addition, the Report deals in detail with the future of public transport and other issues, including cyclists and pedestrians.

Since March 1980 the Minister has had discussions with the local governments concerned and a wide variety of interested community groups.

It is expected that the Government will make a decision about the Study's recommendations by December 1980.

Project Planning

The Department has maintained its policy of close liaison with other Government departments and planning authorities in relation both to new highway projects and to proposed developments which could have a significant impact on the existing or proposed highway system. On a State-wide basis consultation is with the Town and Country Planning Commission, at regional level with the Southern Metropolitan Master Planning Authority, the Tamar Regional Master Planning Authority and the North-West Master Planning Authority and at local level with the appropriate Council. The more important projects are listed below:—

Bass Highway — Don to Ulverstone

The Department commissioned the firm of consulting engineers, Pak-Poy and Associates' to examine and report on alternatives for the improvement of that section of the National Highway between Lillicos Beach and the start of the Ulverstone By-pass. Particular problems on this section of highway include the junction areas at Turners Beach and Forth Main Road. The Consultants' report is expected early in 1980-81.

Bass Highway — Penguin to Burnie

A preliminary investigation of a local by-pass of the existing frontage development between Preservation Bay and Sulphur Creek has commenced. The feasibility of this proposal will be substantially influenced by the stability of the terrain through which the by-pass would be located.

Deloraine By-Pass

Following the completion of the joint study on community attitudes made by the Commonwealth Department of Transport and the Department of Main Roads a firm decision was made to adopt the Northern Route. Detail design of this route has now commenced.

Glen Dhu Housing and Re-development Planning Study

The Launceston Transportation Revision 1976-77 recognised the significant social and environmental problems associated with the proposal to construct a new highway — the Southern Outlet — through the mixed residential/commercial Glen Dhu area. The Revision Report recommended that a housing and re-development planning study of the area be undertaken by the Launceston City Council, the Department of Housing and Construction and the Department of Main Roads to determine whether the construction of the new highway was preferable to the other option of widening Wellington Street.

This problem is currently being investigated by a working group, with members from the above organisations and a Government valuer. Several different road and re-development options have been identified and, because of the social issues involved, some community participation will be required before a final decision can be taken.

In August 1979 the Technical Working Party submitted its interim report to the Steering Committee on the eight options it had identified for increasing road capacity through the Glen Dhu area. These schemes were considered to include all feasible options and they were evaluated in terms of loss of housing and commercial property, development potential, traffic service, social and environmental impact, property acquisition and construction costs.

The Steering Committee directed that further investigation of only the more feasible options should proceed. During this second phase of the study property owners affected by the proposals have been interviewed, preliminary road designs have been prepared to enable more accurate cost estimates to be made and a detailed examination of the impact of the road schemes on the Metropolitan Transport Trust has been carried out by specialist consultants.

It is expected that the proposals will be placed on public display during August 1980 and public comment assessed before a recommendation is made to the Government.

Kings Meadows Connector

Because of difficulties encountered during preliminary design it has been necessary to abandon the line set out in the 1976-77 Launceston Transportation Revision. Investigation of other locations for the route is proceeding.

Hobart Southern Outlet

Earlier planning by the Department for a route between Sandfly and Vines Saddle is being re-appraised. In particular, a detailed study is being made of an alternative to the previously-preferred Northern Route. This alternative is referred to as the Southern Route.

A number of difficult engineering problems have been encountered, particularly in relation to the terrain over which the Southern Route will pass, and when these have been resolved a public exhibition of the alternative proposals is to be held in Huonville in order to obtain expressions of public opinion. This is anticipated to take place within the first half of the 1980-81 financial year.

Right-of-Way Control

Activities in this field, related to the administration and protection of present State roads and future road corridors, continued throughout the year. Such activities included the setting down of conditions and arranging of the Ministerial approvals required by legislation for all service installations within the reservations of State roads, and advice to the Town and Country Planning Commission, local Councils and developers in relation to adjoining property developments, including land subdivision.

It has become increasingly evident to the Department that roadside developments occurring outside existing town or development areas are having a serious effect on the viability, level of service and road safety of arterial State roads and, in some cases, significantly reducing the effective capacity of the highways.

The cumulative effect of random roadside development results in early functional obsolescence of highways and the resultant need for new construction to meet the traffic demands.

The Department presently has virtually no direct control over roadside development and associated accesses to highways, except where roads are proclaimed as 'limited access' roads.

A review of the matters relevant to controlling access from abutting lands was carried out during the year and an internal document 'Access Control on State Roads June, 1980' was produced.

It is of interest that, of the 3 494 kilometres of State roads, access control by the Department can be exercised over only 330 kilometres, or 9.3 per cent of the total. On the remainder, the Department has no direct powers to prevent undesirable access that may seriously threaten the viability of any State Road.

Road Design

SECOND HOBART BRIDGE — ROAD APPROACHES

Detailed design plans have been completed for both the eastern and western shore approach roads to the new bridge. In the case of the eastern shore approach road the plans and specifications were forwarded to the consulting engineers for incorporation in the contract documents for the bridge.

On the western shore the plans include the major rock cutting through Dowsings Point, associated temporary traffic routes and accommodation works for the Army.

BASS HIGHWAY

Old Surrey Road to Chasm Creek

The design for this dual carriageway section has been substantially completed. Agreement on the design lay-out and method of limiting frontage development access, both in the first stage and longer term, has been reached with the Commonwealth Department of Transport.

Devonport to Latrobe

Design of this section of the National Highway commenced and was substantially completed during the year. Major features of this section of highway include the Moriarty Road intersection, which is to be a roundabout, and Port Sorell Main Road Junction, for which a seagull type channelised T junction is favoured.

MIDLAND HIGHWAY

Design of the Midland Highway north of Spring Hill continued during 1979-80. A re-appraisal of a design completed several years ago by consulting engineers was made and a number of minor changes are proposed. This was done in order to ensure that the design conformed to present standards and to take advantage of experience gained in design of other sections.

BROOKER HIGHWAY

Berriedale Interchange

Design plans have been prepared for improvements to Berriedale Road, including new on and off ramps at its junction with the old Midland Highway.

Granton Interchange

The design for the main route, and its connection to the existing highway near the Lyell Highway has been completed. Sufficient design has also been prepared to enable bridge and associated roadworks to be commenced.

LYELL HIGHWAY

New Norfolk to Gretna

The design for the reconstruction of the Lyell Highway between New Norfolk and Lawitta has been finalised and construction work commenced. Planning and design is proceeding on the next section of the highway from Lawitta to Plenty.

ARTHUR HIGHWAY

Port Arthur By-pass

Design of a deviation of the Arthur Highway to by-pass the Port Arthur historic site was designed to suit the requirements of the National Parks and Wildlife Service. A number of outstanding matters remain to be resolved for the associated road system, in particular the Safety Cove Road. The problems relate to both engineering and archeological factors.

ROBERTS POINT ACCESS ROAD — BRUNY ISLAND

Construction of the Roberts Point access road will commence in the financial year 1980-81. Consulting engineers have prepared the tender documents for the road and tenders close early in the new financial year.

The final design of the access road has been completed and land acquisition from the affected property owners has commenced.

The new access road when completed will provide access to a new ferry terminal to be built at Roberts Point, Bruny Island.

OTHER ROAD DESIGN PROJECTS

Detail design was completed on

Arthur Highway between Sorell and Forcett.

Nubeena Secondary Road between Nubeena and Port Arthur.

Elderslie Main Road between the Jordan River and Elderslie and other minor projects.

Detail design is continuing on

Waratah Highway between Somerset and Henrietta;

Tasman Highway between Scottsdale and Ringarooma turnoff; and

Huon Highway between Geeveston and Huonville.

Bridge Design

The more important designs completed were

Hilton Road Overpass on the Northern Outlet Road at Claremont;

Deviation Overpass at Prospect to carry Westbury Road traffic around the permanent bridge construction site;

Emu River Bridge duplication on Bass Highway;

Effluent Pipe Bridge to serve the APPM Ltd's complex at Burnie;

Wivenhoe Railway Underpass on Bass Highway at Burnie; and

Castra Road Overpass on the Ulverstone By-pass.

The more important designs in hand but not completed were

Clyde River Bridge on Lake Highway at Bothwell;

Melbourne Street Underpass on the Launceston Southern Outlet Road at Glen Dhu; and

Inglis River Bridge on Tollymore Lane at Wynyard.

Preliminary design investigations of future projects included —

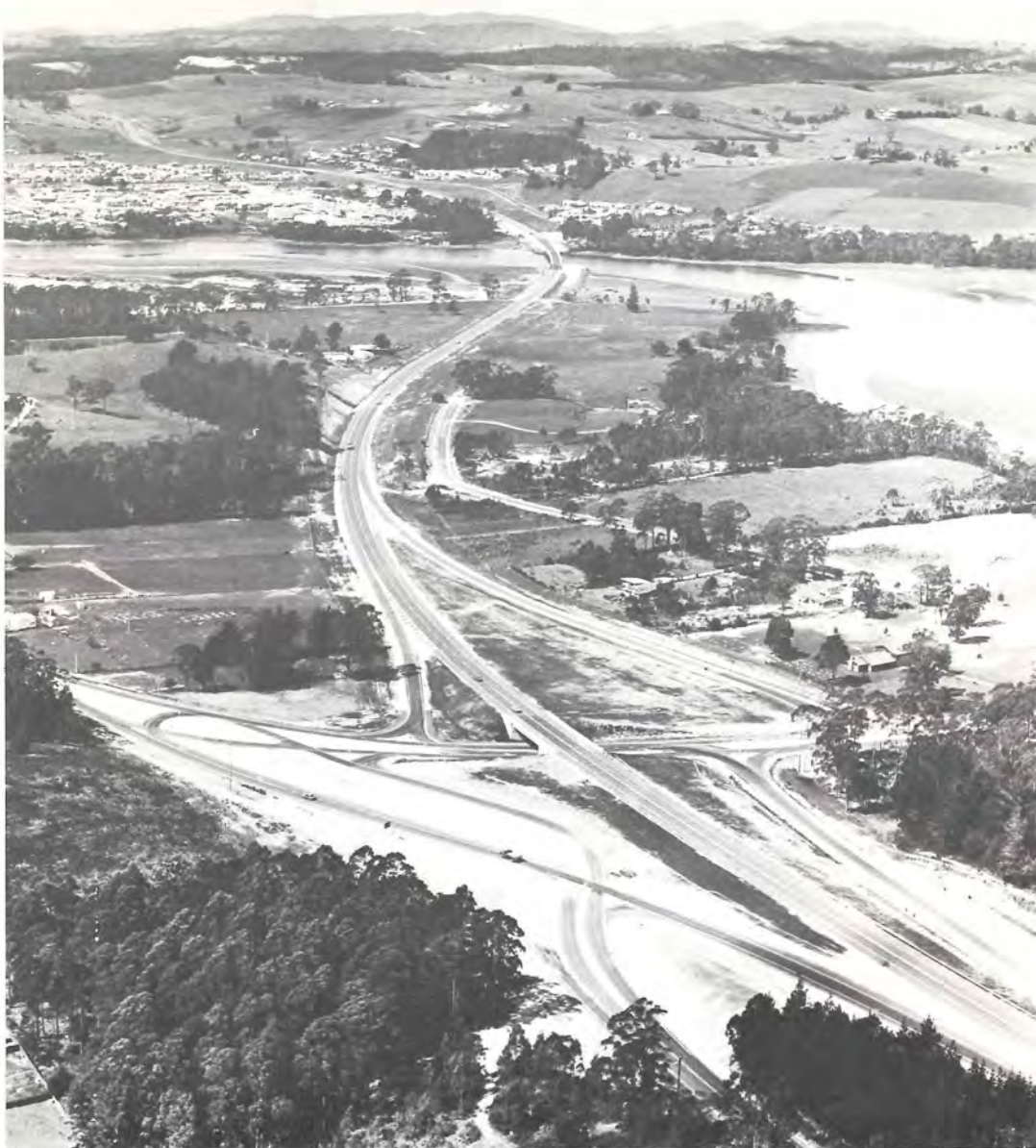
The Westbury Road Overpass at Prospect and several bridge structures, including a railway underpass, a combined bridge and road underpass over the Meander River and a grade separation that forms part of the by-pass of the Bass Highway around Deloraine.

The design study into possible methods of increasing the load-carrying capacity of the Derwent River Bridge at Bridgewater.

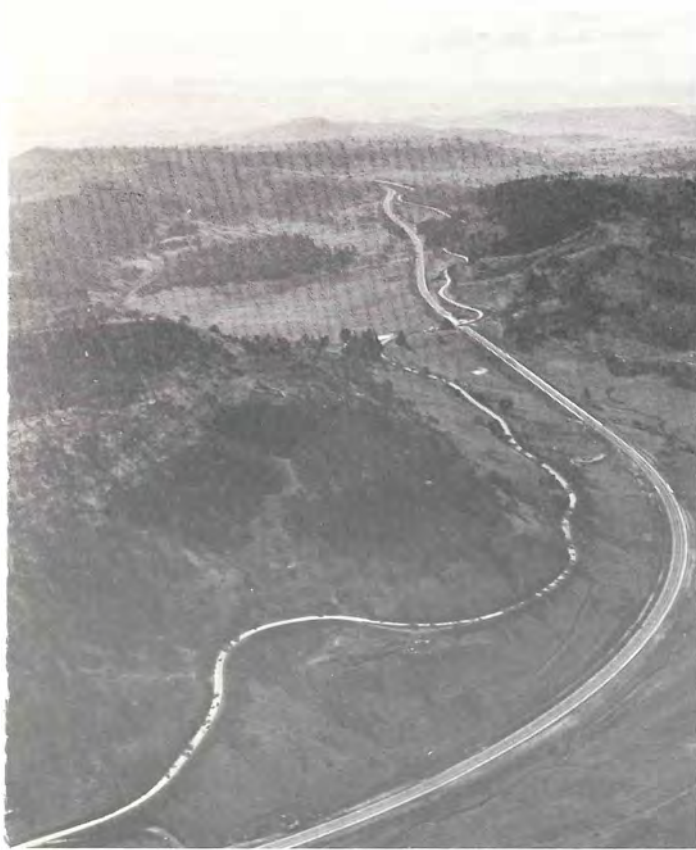
Traffic Services

Traffic Counting

The data collection of traffic densities on the State road network has been continually monitored throughout the year. A new edition of 'Traffic Volumes in Tasmania, 1979' has been produced. Minor improvements have been made to the contents of the document. With the acquisition of auxiliary computer equipment during the latter part of the year it is expected that improved publications will be available in future and that information retrieval will become an automated task.



Bass Highway — Ulverstone By-pass, looking east. South Road Interchange and bridge over Leven River



Reconstruction of Midland Highway at Spring Hill, looking north with Tedworth in middle distance

Forth Road Underpass — Ulverstone By-pass, Bass Highway





Box Hill Road Overpass during construction of Hobart Northern Outlet Road



Tasman Highway

Reconstruction of Scottsdale to Ringarooma Road section — new work at Hang Dog Creek, east of Tonganah



Reinforced earth abutments
Hobart Northern Outlet Road, Black Snake Lane

East Tamar Outlet
Looking north from Mayne Street Overpass



Midland Highway Reconstruction — Spring Hill
New pavement just north of Spring Hill

East Tamar Highway
Heavy vehicles using new south-bound climbing
lane between Egg Island Creek and Mount
Direction





Bass Highway — Ulverstone By-pass looking west
Forth Road Interchange and Castra Main Road Overpass



Road cutting in western approach to Bowen Bridge, looking west



Road cutting in western approach to Bowen Bridge, looking east

Necessary maintenance to the fire detection system in the main cargo shed was also put in hand.

Hydraulics

Continuous hydraulic survey was undertaken on a total length of approximately 62 km of road prior to design for new work or reconstruction including sections of the Midland, Channel, Arthur, Waratah and Bass Highways, the Fenton Main Road and the Grass Tree Hill, Mathinna and Nubeena Secondary Roads.

Detailed hydraulic investigation and drainage design was carried out on sections or junctions of major highways as follows:—

The Hobart Southern Outlet Road, the new Launceston urban arterial road system, the Port Arthur By-pass, the Deloraine By-pass, the Hobart Northern Outlet Road, the Bass Highway (Don Interchange, Ulverstone By-pass and Wynyard By-pass), East Tamar Highway and the Second Hobart Derwent Bridge and approaches.

One hundred and thirty-five separate hydraulic investigations (both major and minor) were made for bridges, culverts, and road drainage. Included were works on the majority of highways and main roads as well as on secondary and council roads; also included were major investigations for the following bridges:—

Jordan River Bridge at Jericho, the Clyde River Bridge at Bothwell and a possible new crossing near the mouth of the Carlton River.

General hydraulic investigation and design was undertaken for forty-one different items, including subdivision drainage onto roads, drainage of school and other building areas, flooding problems, erosion control, irrigation, water supply and sewerage.

Further progress was made in the investigation into the rationalising of design flood frequency and acceptable flood risk on the State's roads with the object of achieving economies in bridgework and general drainage and initial draft recommendations have now been completed.

CONSTRUCTION, MAINTENANCE AND OPERATIONS

Major Works Completed

The following bridgeworks were completed during the year:—

<i>Name</i>	<i>Road</i>	<i>Cost</i> \$
Leven River Bridge	Ulverstone By-pass	1 422 275
Cimitiere Street Underpass	Bathurst Street/Wellington Street Couplet	895 009
Forth Road Underpass	Ulverstone By-pass	512 815
East Risdon Road Underpass	Hobart Eastern Outlet Road	429 250
Lovett Street Underpass	Ulverstone By-pass	415 735
Box Hill Road Overpass	Hobart Northern Outlet Road	401 242
Euston Street Underpass	Hobart Northern Outlet Road	376 532
Jordan River Bridge at Jericho	Midland Highway	258 216
Lytton Street Pumping Station	East Tamar Outlet Road	257 322
Resolution Street Footbridge	Hobart Eastern Outlet Road	142 352
Stephensons Bend Retaining Wall — Ground Anchors — 1st Stage	East Tamar Outlet	126 406
Groningen Road Overpass Duplication	Southern Outlet Road	102 730

Leven River Bridge — Ulverstone By-pass

Work commenced on this bridge in July 1976 and is now completed. This six span, 162 metres long structure has earthfill causeways at each end. The western causeway has been built some 270 metres out across sand and mud flats. The bridge is supported on piles and has a conventional prestressed concrete I-beam and concrete deck superstructure.

Cimitiere Street Underpass — Launceston

This underpass is a six span structure; each span of 24 metres consists of six broad flanged prestressed concrete beams, interconnected to give a flush soffit. The exterior of the bridge superstructure features exposed aggregate fascia panels, and similar exposed aggregate slabs will be used to finish off the spill-through batters at the abutments. The bridge is scheduled to be opened to traffic in July 1980.

Jordan River Bridge — Midland Highway

This four span bridge has an overall length of 53 metres. The superstructure is made up of pretensioned deck slab overlaid with an insitu deck slab. The bridge is the last structure of any consequence involved in the upgrading of the Midland Highway south of Oatlands to National Highway standards through to Oatlands.

Major Works in Progress*Jordan River Bridge — East Derwent Highway*

This six span, 177 metres long bridge is being constructed adjacent to and downstream of the temporary Bailey Bridge, which it will shortly replace. The bridge has complicated geometry, with both horizontal and vertical curvature. Prestressed concrete beams act compositely with the concrete deck, and are supported on concrete substructures — those in the river are founded on piles, while the remainder are on spread footings. The bridge should be finished and opened to traffic in early 1981.

South Esk River Bridge — Longford

This six span, 181 metres long bridge is the main river structure on the Longford Deviation of the Illawarra Main Road. The bridge is supported on piles, and has a superstructure consisting of prestressed concrete beams with a concrete deck. The bridge is scheduled for completion in late 1981. Associated with the South Esk River Bridge is a large flood opening bridge of similar construction, but of four spans. The Longford Deviation is scheduled to be opened to traffic in early 1983.

Dampier Street Overpass

This overpass is a two span structure, with a broad flanged prestressed concrete beam superstructure, spanning the two carriageways of the Hobart Eastern Outlet Road. The bridge carries two lanes of traffic and has a footpath to cater mainly for school children attending the Warrane primary and secondary schools. The superstructure is faced with exposed aggregate concrete panels, as is also the spill-through fill of the abutments. The bridge is the last structure to be built on this new section of the road from Rosny Hill to Warrane. It is expected to be completed in July 1980, about five months before the scheduled opening to traffic of the outlet road.

Midland Highway

Works are now progressing toward the next section which is the by-pass of the township of Jericho. Preliminary works have been carried out and it is expected that the by-pass will be in operation in 1981.

Arthur Highway

Reconstruction work commenced on this highway from the outskirts of Sorell toward Lewisham turn-off. A length of 2.3 km was sealed and this included a substantial deviation from the old highway, was opened to traffic on 23 May 1980. A further length of 4 km of the highway was strengthened with bituminous concrete between Dunalley and Eaglehawk Neck.

Hobart Eastern Outlet Road

During the year works have been mainly centred on completion of earthworks and the placing of pavement material. This work is now substantially complete on both carriageways from Rosny Hill to Dampier Street and the eastbound carriageway from Dampier Street to and including the interchange at Sun Valley. It is expected to be open to traffic in December 1980.

Grass Tree Hill Secondary Road

Works were carried out on two sections of this road during the year. The previously constructed work was completed with a layer of bituminous concrete for 4.2 km from Risdon Vale to the top of Grass Tree Hill. A further 2.9 km was reconstructed from the end of the previous 'trial' section near the Richmond end of the road. The remaining length of this road to be constructed is 2 km and this is expected to be undertaken in the 1980-81 financial year.

Hobart Northern Outlet Road

Works on this road have been concentrated at Berriedale Road and Black Snake Lane and Dooleys Creek diversion was completed. Black Snake Lane was deviated to allow for the construction of the reinforced earth abutments for the future overpass.

Although a number of reinforced earth walls and abutments have been constructed in some other States in recent years, this is the first one built in Tasmania. The technique can lead to cheaper construction and is useful in confined spaces.

The Box Hill Road Overpass is a major two span structure over this highway. During the year all substructure including batter protection was completed, the inverted tee-beams erected and the deck and fencing completed. The overpass was opened to traffic on 21 March 1980.

Elderslie Main Road

Basic earthworks on the final length to Elderslie are now completed and the road brought to sub-base level. Subject to funding it is hoped to complete the reconstruction during 1980-81.

Lyell Highway

The re-alignment at Plenty was completed and work commenced on the reconstruction of the section of this highway from New Norfolk to Lawitta. The pavement width is 7.4 m.

Nubeena Secondary Road

Reconstruction of this road between Nubeena and Port Arthur was completed during the year with the sealing of the remaining 7.5 km. Reconstruction of the dust nuisance seal in Nubeena was commenced, and a new link road between the Nubeena Secondary Road and the Arthur Highway at Port Arthur is proposed for 1980-81.

Huon Highway

Reconstruction works were completed to Shipwrights Point during the year and the section on the Huonville side of Castle Forbes Bay was commenced.

Second Hobart Bridge — Dowsings Point

During the year the western road approaches for the Second Hobart Bridge at Dowsings Point were commenced. Works consisted of a new access road to the Bailey Bridge and the development of a large cutting through Dowsings Point and an associated fill over an old tip site.

East Tamar Highway

Three southbound climbing lanes were completed:—

- (a) south of Dilston 1.4 km;
- (b) at Dilston 1.6 km; and
- (c) extension south of Mt Direction 0.3km.

Southbound climbing lanes, totalling 3.8 km on two sections near the Thermal Power Station, are under construction and are due to be completed by December 1980.

Mathinna Secondary Road

Reconstruction was commenced on a 5.4 km section and earthworks and base course gravel have been completed.

East Tamar Outlet Road

Drainage and earthworks were substantially completed between the Mowbray Connector and the junction of the Alanvale Connector with George Town Road. Some pavement material was placed during the year. This section is programmed to be opened to traffic early in 1981.

It was decided to extend the existing retaining wall at Stephensons Bend in order to retain a further section of the formation of this road alongside the Tamar River.

This new work comprises the driving of 80 m of steel sheet pile retaining wall, the construction of seven reinforced concrete anchor blocks and installation of horizontal ties.

Bathurst/Wellington Street Couplet

Construction of the approaches to Cimitiere Street Underpass, together with widening and strengthening of Wellington Street, between Cameron and Paterson Streets, and Charles Street between the Charles Street Bridge and William Street, is substantially complete. It is programmed to open the Couplet to traffic in July 1980 with further drainage works and the placement of an asphalt wearing surface to be completed in 1981.

Tasman Highway — Scottsdale to Ringarooma Road

A further 2.4 km was sealed eastwards to L77.2 kilometres. The 3.5 km section between Scottsdale and Lings Siding is currently under reconstruction and is to be sealed next year.

Ulverstone By-pass Construction

Construction of the 7km long Ulverstone By-pass continued in 1979-80 and roadworks were very near completion at the end of June 1980, with the bulk of the sealing work completed and only minor works remaining.

The Leven River Bridge and the Forth Road Underpass were both completed and the Castra Road Overpass required only completion of work on fascia panels, beam infills and bridge fence in 1980-81.

It is expected that the By-pass will be opened to traffic in late August 1980. Landscaping work will be carried out in 1980-81 and 1981-82.

Bass Highway — Latrobe to Devonport

Work commenced in December 1979 on reconstruction of 5.8 km of the Bass Highway between Mersey Main Road junction and East Devonport.

The major improvements being provided are a roundabout at the Moriarty Road junction; a climbing lane from Wyndarra Lodge to Port Sorell Main Road; an enlarged T junction at Port Sorell Main Road and 1 km of climbing lane west of this junction.

By the end of the financial year pavement construction over a length of 3 km, some sealing, and preparation of the Moriarty Road junction to the gravel stage, had been undertaken and earthworks were proceeding between Wyndarra Lodge and Winspear's Road.

Waratah Highway Reconstruction

Reconstruction of a further 4 km south from Shepherds Lane at Elliott towards Yolla was completed and a total of 3 km of highway sealed.

Further clearing and fencing was completed south of Yolla towards West Takone junction.

Zeehan-Strahan Road

Available funds for this project were concentrated on the Henty Deviation and the earthworks were completed to the stage where traffic could use the Deviation by November 1979.

Bridgeworks undertaken during the financial year included replacement of Badger Creek No. 1 Bridge by twin 1 800 mm concrete pipes; Badger Creek No. 2 Bridge renewed as a single lane timber bridge; replacement of the Badger Tributary Bridge by single 1 800 mm concrete pipes, and the Flood Opening south of the Henty River being replaced by twin 1 800 mm concrete pipes.

H.E.C. Pieman Road

The work being undertaken by the Department of Main Roads is completion of the road pavement from formation level to sealing. Also a concrete bridge over the Stanley River is being completed.

During the year 17 km of the road was sealed from the Bastyan Dam to the Wilson River, and further pavement work undertaken between the Wilson and Stanley Rivers (a distance of 8.7 km). Final work on this and other sections of the road will be completed in 1980-81.

Road Maintenance

The Department has been able to maintain the classified system in a generally satisfactory condition despite the decrease of available funds in real terms.

Mild climatic conditions resulted in reduced expenditure on emergency situations, and enhanced the overall maintenance programme. During the year a programme of upgrading facilities at maintenance depots has been pursued, along with the re-establishment of two depots away from built-up areas.

Bituminous Surfacing

A cost feature which has caused some concern during the year is the spiralling price of bitumen.

Greater use of asphalt for pavement strengthening was made during the past year.

Sealing, re-sealing and asphalt paving carried out on State classified roads throughout the year are shown on Annexure C.

Bridge Maintenance

Batman Bridge

The task of inspecting the stay cables and tower of the bridge was completed during the year and in conjunction with the inspection, painting of the tower was carried out for the first time since the bridge was constructed. The inspection confirmed that all principal structural components are continuing to perform satisfactorily.

The year also saw the completion of the painting of superstructure trusswork which has been carried out progressively over the last six years.

A certain amount of maintenance work at deck level remains to be attended to. This includes checking of cable anchorages at the trusses, rectification of minor drainage problems and bird-proofing certain areas where contamination from bird droppings is occurring.

Bridgewater Bridge

Work carried out during the year included replacement of the timber deck of the liftspan; installation of hydraulic machinery to operate the rail locking bars; and commencement of a program to reconstruct diaphragm walls of approach span piers.

In recent years the liftspan deck was becoming more demanding in its maintenance requirements due to deterioration in timbers and increased traffic loading. Its renewal was carried out in a nineteen day period commencing on 14 January 1980 during which the bridge was closed to all road traffic. The work involved removal of the decking timbers and supporting longitudinal steel beams and replacing these with an all-steel deck comprising a system of longitudinal and transverse beams carrying heavy gauge corrugated sheeting to which hotmix surfacing was applied.

During the 1979-80 year the liftspan openings for river traffic movements were as follows:—

Newsprint vessels	....	....	....	....	....	....	....	....	606
Ferries and charter	....	....	....	....	....	....	....	....	88
Other Private	....	....	....	....	....	....	....	....	94
TOTAL	....	....	....	....	....	....	....	....	788

This represents a slight overall increase on the previous year.

Bridge over Elizabeth River at Campbell Town

Minor maintenance work was carried out on this historic triple arch bridge of brick and sandstone construction which carries the Midland Highway. Earlier inspection had revealed deep, but relatively superficial weathering of the external masonry surfaces, particularly in some of the softer convict made bricks. Remedial work mainly comprised raking out and repointing mortar joints, and replacement of some of the more badly eroded brickwork.

Tasman Bridge

In July and August 1979, a detailed inspection was undertaken of all work carried out on the bridge under the restoration and widening contracts. The inspection involved officers of the Hydro-Electric Commission representing the Joint Tasman Bridge Restoration Commission, the Consultants and the Department of Main Roads, and its purpose was to identify any aspects of the work which might not be of a standard acceptable to the Department when resuming responsibility for the bridge.

As a result, a number of potential minor problem areas were located and following discussions with the Joint Tasman Bridge Restoration Commission, it was agreed that the Commission would make available to the Department a sum of money to enable these to be rectified. Responsibility for the bridge was resumed by the Department in June 1980.

Jetties and Wharves

Smithton Wharf

\$26 400 was expended during 1979-80 on the progressive reconstruction of Smithton Wharf by Departmental labour. To date the total cost of this phase of work by the Department is approximately \$105 000. Reconstruction is now planned to be completed during 1980-81 at an estimated further cost of \$20 000.

Naracoopa Jetty, King Island

The sole function of this jetty at the present time is that of a terminal to discharge fuel oil into the King Island storage tanks. The jetty maintenance costs are now high, in the order of \$40 000 per annum.

A study was commenced in 1978-79 and continued in 1979-80 to investigate the feasibility of reducing the size of this 220 metre long jetty or dispensing with it in order to reduce the high maintenance costs.

Georges Bay Training Wall

Maintenance to storm damaged sections of the existing wall was undertaken at a cost of approximately \$20 000.

Charles Street Jetty, Triabunna

The main section of this jetty was renewed to a design previously prepared, with main members in timber and a deck of reinforced concrete. Cost of this work was approximately \$33 000.

Bruny Ferry Berths

(a) Existing Berths —

Approximately \$25 000 was expended on reconstruction of the 'thumb' and the fendering system at the Barnes Bay terminal. These repairs were necessary in order to keep this terminal operable.

(b) Proposed New Berths at Kettering and Roberts Point —

Design and documentation for the new berths and new approach road at Roberts Point were largely completed by the consulting engineers during 1977-78. A special Committee has been formed to examine construction timing for these berths, with financing spread over four or five years. During 1979-80 documentation was finally completed for the new approach road to the Roberts Point terminal and tenders for this work were called towards the end of the financial year.

Investigations and Materials Testing

The Materials and Research Section continued to provide testing and consulting services for the design, construction and maintenance functions of the Department. It also provided specialised services to other Departments. The work of the section included pavement condition studies (strength, roughness, skidding); route selection studies (excavation properties, slope stability, pavement design), materials testing (soil, asphalt, concrete, paint, etc.) for the design and construction of pavement and bridge structures and for the selection of tender samples and construction and product control.

During the year, major route feasibility and design studies were completed for the Southern Outlet Road Launceston; Bass Highway — Preservation Bay to Howth section and the Hobart Southern Outlet, Sandfly to Vines Saddle. Sixteen foundation investigations for major structures were undertaken. Six of these were for other Departments.

A brochure 'Science in Road Making' aimed at increasing Departmental and external awareness of Materials and Research services was printed and distributed.

Landscaping

During the year 13 500 trees and shrubs grown at the Department's Nursery were planted out. Major road projects such as the Eastern Outlet, Berriedale Interchange and the East Tamar Outlet were landscaped along with other reconstruction projects.

CONSTRUCTION PLANT AND WORKSHOPS

General

The Plant Division, which incorporates the workshops at Moonah, Launceston and Ulverstone, provides plant and workshop facilities for the Department's construction and maintenance activities on roads and bridges.

Plant usage in 1979-80 was generally similar to that of the previous year and the income from plant hire amounted to an increase of 1.9 per cent over the previous year. The only increase in hire rates during the year was in relation to light vehicles and was necessary due mainly to the steep increases in fuel costs. However, a more general increase in hire rates was deferred until the new fiscal year.

Plant Operations

Although as stated earlier the overall plant usage was similar to that of the previous year, there were some marked changes within categories. The utilisation of medium dozers and semi-trailer tip trucks was considerably less than the previous year whilst there was a marked increase in the utilisation of rollers.

An additional Plant Inspector was appointed to each District and an Operator Instructor was appointed for Statewide duties. District Engineers and Plant Supervisors have reported favourably on the benefits obtained from these appointments.

Defensive driving seminars were again held in all three district centres and seventy-six personnel attended. These training seminars were conducted by the Division of Road Safety.

There was a marked decrease in the frequency of vehicle accidents during the year under review and whilst the ratio of one accident per 200 000 km may seem low, there is still much room for improvement. Over 500 vehicles are now in service.

Depots and Workshops

The Workshop Production Account recorded an annual turnover of \$4 638 851.

Workshop loaded rates were adjusted twice during the year to keep pace with rising wages and service costs.

Projects of interest undertaken at Moonah Depot during the year included completion of the steel fabrication for Resolution Street Pedestrian Overpass, the commencement of a similar structure for erection at the Launceston Grammar School, and steelwork for the redecking of the Bridgewater Bridge lift span.

Alterations to staff offices together with the provision of new furniture and P.A.B.X. switchboard have resulted in improved accommodation and facilities at Moonah Depot.

Financial Statements

The Plant Division operates with a March to March financial year. The Division trading account is the Road Construction Plant Suspense Account which must be kept as required by section 6 of the Roads and Jetties Act 1935.

The Road Construction Plant Suspense Account financial statements for the period 25 March 1979 to 22 March 1980 are reported in Annexure D.

Mr I. N. McGuinness was promoted to the position of Research Officer, Mr E. A. Pitman was promoted to the position of Senior Bridge Design Engineer, and Mr A. J. Rae was appointed to the position of Accountant (Costing).

The following long-serving officers retired during the year:—

Mr B. H. Byrne, Clerk — 17 years service.

Mr R. W. Hoare, Inspector — 17 years service.

Mr J. A. Corkhill, Engineer, was tragically lost at sea in December 1979.

Property Acquisitions

During 1979-80 a total of 141 new acquisitions were commenced and at the end of the financial year 345 acquisitions were in progress, of which thirty-five were subject to compulsory process. Expenditure on property acquisitions for the year was \$810 082 compared with \$755 289 for the preceding year.

Major areas of expenditure were in Launceston for properties affected by the East Tamar Outlet, the Mowbray Connector and the Alanvale Connector and in Ulverstone for properties for the Ulverstone Bypass. Other important areas of expenditure were for the reconstruction of the Midland Highway, Hobart Eastern Outlet Road and the Waratah Highway.

The reconstruction of the Blessington Main Road, Huon Highway, Nubeena Secondary Road and the Channel Highway resulted in many minor acquisitions of property.

Over the years the Department has acquired a number of residential or commercial properties in advance of requirements because of hardship experienced by some property owners following the announcement of road proposals. Forty-eight such properties are leased to tenants.

Vacant land acquired in advance is also leased until required for road purposes and at present sixty-one parcels of land are under lease.

Study Courses and Staff Development Programme

The Department has continued its policy in respect of University scholarships, providing a living allowance and meeting fees for the study of engineering at the University of Tasmania. There are currently five scholarship holders in the engineering faculty.

At 30 June 1980 there were thirty officers of the Department receiving time off to attend as part-time students at tertiary institutions, studying subjects related to their employment.

During the year ten internal staff development courses were held, covering technical, professional and administrative staff of the Department. In addition, selected officers attended external training courses and seminars arranged by organisations in both the public and private sectors.

Stores

The construction and plant stores requirements of the Department are managed through a decentralised stores system, with a principal store at the main workshop complex at Moonah and major branch stores at the District Offices in Launceston and Ulverstone.

The total value of all stores issued during the year from the three centres was approximately \$1.9 million and the value of stores holdings at 30 June 1980 was slightly in excess of \$770 000.

The Supply and Tender Department has increased considerably the number of items for which it has let contracts on the Department's behalf. Ordering of these items is therefore carried out direct by the Department's Stores staff and this has imposed a substantial additional workload.

A good deal of reliance is placed on local and contract suppliers for spare parts and increasing staff resources are directed to the location of reliable suppliers and the follow-up of orders to expedite delivery. The Department has adopted a system of holding many basic automotive spare parts on consignment from suppliers and this ensures that stores redundancy is reduced, because the unused section of such consignments can eventually be returned to the supplier at no cost when the Department moves out of that particular type of plant unit.

Industrial

Wage rates continued to rise, mainly as a result of National Wage and work value decisions.

Departmental relationships with unions remained very good and only a small amount of time was lost due to industrial action.

As at 30 June 1980 the number of employees engaged in workshop and field operations were —

Workshops and depots	....	....	....	....	....	....	....	....	290
Road and bridge construction and maintenance	....	....	....	....	....	....	....	....	915
TOTAL	....	....	....	....	....	....	....	....	1 205

Retirements for the year numbered fifty-five and a large percentage of these served the D.M.R. for many years. Those with long service included —

Foreman C. N. Burgess — 41 years service.
 Leading Hand W. Joseph — 40 years service.
 Foreman L. J. Wootton — 39 years service.
 Welder T. Irving — 34 years service.
 Sub Foreman C. D. Evans — 33 years service.
 Foreman M. J. Cox — 33 years service.
 Foreman R. Mitchell — 33 years service.
 Foreman L. W. Sherriff — 32 years service.
 Roller Driver R. Kudela — 29 years service.
 Foreman H. G. Waldren — 26 years service.

Workers' Compensation

The continued high cost of workers' compensation claims is still a major concern to the Department. A breakdown of the cost of claims for the year is —

									\$
Weekly payments	....	....	....	....	....	....	....	....	151 435
Medical expenses	....	....	....	....	....	....	....	....	43 716
Lump sum settlements	....	....	....	....	....	....	....	....	52 628
TOTAL	....	....	....	....	....	....	....	....	\$247 779

There have been a number of accidents in this year which have resulted in Common Law claims, the cost of which is uncertain at this time.

Industrial Safety

Again an active programme for Accident Prevention throughout all branches of the Department was undertaken.

This included on site instruction to both road and bridge construction gangs, workshop personnel in Hobart, Launceston and Ulverstone and maintenance gangs in all Districts.

Safety inspections were also carried out in most construction areas and workshops with special attention being given to machine guarding and correct erection and use of scaffolding on bridge sites.

To maintain one qualified 'First Aid Attendant' in each gang, first aid classes were conducted in all Districts.

With reference to the Department's accident statistics it is pleasing to note that the number of 'Lost Time Accidents' have continued to fall over the last seven years. Even though the reduction has been small each year the results are pleasing because of the trend downward being maintained.

Safety Committees throughout the Department met regularly and assisted in improving safety on the job in areas under their control.

Rehabilitation

The Department's Rehabilitation Committee was active during the year and considered fourteen cases of Departmental employees as subjects for rehabilitation.

Of the cases processed, four were successfully rehabilitated back to their normal duties after a recovery period which included work on light duties, five were found alternative positions suitable to their disabilities, three were retired on the grounds of ill health and two found other employment outside the Department.

ACKNOWLEDGMENT

I express my appreciation to the staff and employees of the Department for the manner in which they have responded to all demands placed upon them during the year.

On behalf of the Department I extend thanks to all the State and Commonwealth Departments and local government bodies which have co-operated with or provided assistance to the Department during the year.

20 November 1980.

G. E. C. McKERCHER, Director of Main Roads.

Annexure A
LOAN FUND EXPENDITURE 1979-80

1978-79 \$		1979-80 \$
	<i>Roads and Bridges—</i>	
250 000	Bridge renewals generally	200 000
1 200 000	Hobart Eastern Outlet Road	1 130 761
....	Hobart Northern Outlet Road .....	....
500 000	Tasman Highway, Scottsdale to Ringarooma Turnoff	500 000
500 000	Huon Highway, Huonville to Geeveston	500 000
550 000	Strahan-Zeehan Road	467 495
500 000	Illawarra Main Road, Deviation at Longford	600 000
....	Access Road to Kingston Fire Station	1 744
1 200 000	East Tamar Outlet	1 100 000
329 000	Refund to Consolidated Revenue for Administration	311 500
\$5 029 000	TOTAL (Roads and Bridges)	\$4 811 500
	<i>Other Works—</i>	
78 144	Launceston Flood Protection	60 805
106 477	Jetties and Facilities for Fishermen	150 000
184 621	TOTAL (Other Works)	210 805
\$5 213 621	TOTAL (All Works)	\$5 022 305

Annexure B
FINANCIAL ASSISTANCE TO LOCAL GOVERNMENT AUTHORITIES

1978-79 \$		1979-80 \$
	<i>Direct Grants—</i>	
55 500	Rural Arterial Roads—Construction	366 600
2 208 067	Rural Local Roads—Construction	2 313 508
1 566 475	Maintenance	1 715 350
281 053	Urban Arterial Roads—Construction	357 072
23 500	Maintenance .....	....
1 099 400	Urban Local Roads—Construction	1 249 365
82 050	Maintenance	110 105
176 100	Minor Improvements for Traffic Engineering and Road Safety	210 563
5 492 145	TOTAL	6 322 563
	<i>Work on Council Roads Financed and Carried out by D.M.R.—</i>	
1 286 626	Repair and Renewal of Bridges	1 247 778
164 392	Roadworks	143 117
\$6 943 163	TOTAL	\$7 713 458

Annexure C
BITUMINOUS SURFACING COMPLETED 1979-80 (km)

										Hot Bitumen Sprayed Seal					
Road										Prime and Seal	Reseal	Primer Seal	Asphalt	Total	
South-East District —															
Arthur Highway										0.17	....	2.24	4.00	6.41	
Channel Highway										0.40	1.13	....	....	1.53	
Domain Highway										....	0.20	....	....	0.20	
Dowsings Point Highway										....	....	0.60	....	0.60	
East Derwent Highway										....	2.00	....	....	2.00	
Huon Highway										1.54	8.25	....	0.46	10.25	
Lake Highway										....	14.09	....	....	14.09	
Lyell Highway										....	24.11	1.17	1.61	26.89	
Midland Highway										8.01	....	0.13	3.36	11.50	
Northern Outlet Road										....	....	....	0.65	0.65	
Southern Outlet Road										0.07	2.70	....	....	2.77	
Tasman Highway										....	1.93	2.65	....	4.58	
Elderslie Main Road										....	0.97	....	....	0.97	
Glen Huon Main Road										....	7.08	0.40	....	7.48	
Nicholls Rivulet Main Road										....	0.20	....	....	0.20	
Ellendale Secondary Road										....	7.57	....	....	7.57	
Grass Tree Hill Secondary Road										....	....	1.66	7.67	9.33	
Nubeena Secondary Road										8.20	....	....	....	8.20	
Sandfly Secondary Road										....	....	....	0.46	0.46	
South Arm Secondary Road										....	....	0.18	0.18	0.36	
North-East District —															
Bass Highway										....	....	....	1.67	1.67	
East Tamar Highway										4.24	....	....	0.76	5.00	
Midland Highway										....	2.57	....	1.24	3.81	
Tasman Highway										4.07	15.15	....	10.43	29.65	
West Tamar Highway										....	0.29	....	0.80	1.09	
Blessington Main Road										1.59	....	....	....	1.59	
Esk Main Road										....	....	....	2.43	2.43	
Frankford Main Road										0.79	....	....	....	0.79	
Gladstone Main Road....										....	23.44	....	....	23.44	
Illawarra Main Road										....	8.40	....	....	8.40	
Kelso Main Road										....	5.43	....	....	5.43	
Lake Leake Main Road										2.48	....	....	....	2.48	
Rowella Main Road										....	5.61	....	....	5.61	
Winkleigh Main Road										....	10.32	....	....	10.32	
Rossarden Secondary Road										2.85	....	....	....	2.85	
Storeys Creek Secondary Road										9.16	0.42	....	....	9.58	
Batman Developmental Road										....	....	....	3.72	3.72	
Poatina Developmental Road										0.24	2.36	....	3.82	6.42	
North-West District—															
Bass Highway										0.20	....	....	9.50	9.70	
Lyell Highway										0.50	32.00	....	....	32.50	
Waratah Highway										5.70	....	....	2.30	8.00	
Devonport Main Road										....	0.90	....	....	0.90	
King Island Main Road										....	4.70	....	....	4.70	
Preston Main Road										....	4.60	....	....	4.60	
Stony Rise Main Road										....	....	....	1.30	1.30	
Wilmot Main Road										....	8.30	....	....	8.30	
Cethana Tourist Road										....	3.90	....	....	3.90	
Olivers Tourist Road										....	2.40	....	....	2.40	
TOTALS										50.21	201.02	9.83	56.36	317.42	

Annexure D
ROAD CONSTRUCTION PLANT SUSPENSE ACCOUNT 1979-80
INCOME AND EXPENDITURE STATEMENT

<i>Period Ending 24.3.79 \$</i>		<i>Period Ending 22.3.80 \$</i>
	Income —	
	Earnings —	
6 597 020	Plant Hire	6 723 560
4 477 750	Workshop Charges	4 638 887
11 331	Other Income	29 509
213 296	Net Profit on Sale of Plant and Stores and Stocktaking Adjustments	217 637
<u>\$11 299 397</u>	TOTAL	<u>\$11 609 593</u>
	Expenditure —	
4 827 845	Plant Operation and Maintenance	5 425 879
4 261 806	Workshop Operations	4 546 654
410 841	Plant Depot Administration and Maintenance	682 653
1 116 654	Provision for Depreciation of Plant, Equipment and Buildings	1 302 513
13 872	Net Loss on Sale and Write-off of Plant Stores and Stocktaking Adjustments	6 330
<u>10 631 018</u>		<u>11 964 029</u>
668 379	Excess of Income over Expenditure for Period	354 436 Cr
<u>\$11 299 397</u>	TOTAL	<u>\$11 609 593</u>

ROAD CONSTRUCTION PLANT SUSPENSE ACCOUNT 1979-80
Balance Sheet as at 22 March 1980

<i>1979 \$</i>		<i>1980 \$</i>
	NATURE AND SOURCE OF FUNDS USED —	
	Funds provided by State Treasurer —	
194 607	Valuation of Plant and Equipment held at 30 June 1945 and Stock on Hand held at 30 June 1946	194 607
3 140 730	Loan Funds	3 140 730
6 769	Commonwealth Grant	6 769
309 434	State Highways Trust Fund	326 897
2 025 000	General Reserve for Increased Cost of Plant Replacement	2 913 489
1 978 812	Accumulation Account	709 785
	Current Liabilities —	
76 388	Sundry Creditors (Store)	121 643
319 954	Accrued Expenses	620 220
	Provisions —	
8 730	Motor Vehicle Insurance	9 015
5 606	Plant Accident Insurance	4 510
<u>\$8 066 030</u>		<u>\$8 047 665</u>
	THESE FUNDS ARE REPRESENTED BY —	
	Current Assets —	
593 521	Cash at Treasury	34 538
291 772	Stock on Hand	316 175
118 457	Work in Progress — Deferred Charges	55 285
425 609	Accrued Charges — Plant Hire	420 490
53 219	Stores Issues	83 886
325 692	Workshops	537 384
4 503	Apprentice Tool Kits	3 890
<u>1 812 773</u>		<u>1 451 648</u>
	Fixed Assets —	
12 814 130	Land, Buildings, Plant and Equipment at cost	14 057 604
(6 560 873)	Less Provision for Depreciation	(7 461 587)
<u>\$8 066 030</u>		<u>\$8 047 665</u>

STATEMENT OF SOURCE AND APPLICATION OF FUNDS

1979 \$		1980 \$
	<i>Source of Funds—</i>	
668 379	Profit from Operations	354 436 Cr
1 116 655	Add Non-Cash Item Depreciation	1 302 513
1 785 034		948 077
198 593	Less Profit on Sale of Plant Less Costs	208 920
1 586 441		739 157
....	Increase in Motor Vehicle Insurance Reserve	285
335 241	Proceeds from Sale of Plant	380 865
75 530	Proceeds from Loan Funds ....	....
....	Decrease in Working Capital	706 646
\$1 997 212		\$1 826 953
	<i>Application of Funds—</i>	
62 454	Increase in Working Capital ....	....
6 392	Decrease in Provision for Plant Accident Insurance	1 096
150	Decrease in Provision for Motor Vehicle Insurance ....	....
91 371	Improvements to Depots	74 865
75 530	Additions to Amenities Building, Moonah ....	....
413 396	Purchase of New Plant	263 934
1 295 634	Purchase of Replacement Plant	1 458 306
52 285	Purchase of Workshop Equipment and Tools	28 752
\$1 997 212		\$1 826 753